



58994.ST25

#23/E

RECEIVED

APR 24 2002

TECH CENTER 1600/2900

SEQUENCE LISTING

<110> Goulmy, Elsa

<120> METHOD FOR TYPING OF MINOR HISTOCOMPATIBILITY ANTIGEN HA-1

<130> 58994

<140> 09/269,250

<141> 1999-05-21

<160> 38

<170> PatentIn version 3.1

<210> 1

<211> 377

<212> DNA

<213> Human

<400> 1

gtgagagcca cggggacacc gaggcctggg tggaagacag agccagaccc aagggaggat
60ggagggaggg acttggggag gctcagaagg gagggaggct cagatggcag ggagggctgt
120gtggaagagg ccatgacagc taaggctctg agggatgtgt aggagtttgg tgggggagtc
180cctgagcgta cactgggtca agaggggtgcc cactttattt tttttaaggg atctgatggc
240aattaggagg gaaaggcaga ggaaatgtcc catgcacagg ctcagaaaca cggaaacaga
300gaatgcattt gggggccaag gtgtggggtg ccgctgggtg aggatgaagg catgacaacg
360ccaggcagaa gggcaat
377

<210> 2
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 2
gtgctgcctc ctggacactg
20

<210> 3
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 3
tggctctcac cgtcatgcag
20

<210> 4
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 4
tggctctcac cgtcacgcaa
20

<210> 5
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 5

gcattctctg ttccggtgtt

20

<210> 6

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 6

cttaaggagt gtgtgctgca

20

<210> 7

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 7

cttaaggagt gtgtgttgcg

20

<210> 8

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 8
gctgtcatgg cctcttccac
20

<210> 9
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 9
gcattctctg tttcctgtt
20

<210> 10
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 10
ggcagagagc cctcgcagcc
20

<210> 11
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 11
gtgtgttgcg tgacggtg
18

<210> 12
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 12
gtgtgttgcg tgacg
15

<210> 13
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 13
tgtgtgttgc gtgacg
16

<210> 14
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 14
tgtgtgctgc atgacggtg
19

<210> 15
<211> 18
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 15

tgtgtgctgc atgacggt
18

<210> 16

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 16

gtgtgctgca tgacgggtg
18

<210> 17

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exon Fragments

<220>

<221> CDS

<222> (1)..(27)

<223>

<400> 17

gtg ttg cgt gac gac ctg ctt gag gcc
27

Val Leu Arg Asp Asp Leu Leu Glu Ala

1

5

<210> 18
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Exon Fragments

<400> 18

Val Leu Arg Asp Asp Leu Leu Glu Ala
1 5

<210> 19
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Exon Fragments

<220>
<221> CDS
<222> (1)..(27)
<223>

<400> 19
gtg ctg cat gac gac ctc ctt gag gcc
27
Val Leu His Asp Asp Leu Leu Glu Ala
1 5

<210> 20
<211> 9
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exon Fragments

<400> 20

Val Leu His Asp Asp Leu Leu Glu Ala

1

5

<210> 21

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exon Fragments

<400> 21

gtgttgcggtg acggtgagag cca

23

<210> 22

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exon Fragments

<400> 22

ctcactccga ctctccccag cagacctcct tgaggcc

37

<210> 23

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 23
 ccggcatgga cgtcgtcgag gacatctccc atc
 33

<210> 24
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 24
 ctacttcagg ccacagcaat cgtctccagg
 30

<210> 25
 <211> 39
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR Product

<220>
 <221> CDS
 <222> (1)..(39)
 <223>

<400> 25
 gag tgt gtg ttg cgt gac gac ctc ctt gag gcc cgc cgc
 39
 Glu Cys Val Leu Arg Asp Asp Leu Leu Glu Ala Arg Arg

1

5

10

<210> 26
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR Product

<400> 26

Glu Cys Val Leu Arg Asp Asp Leu Leu Glu Ala Arg Arg
 1 5 10

<210> 27
 <211> 39
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR Product

<220>
 <221> CDS
 <222> (1)..(39)
 <223>

<400> 27
 gag tgt gtg ctg cat gac gac ctc ctt gag gcc cgc cgc
 39
 Glu Cys Val Leu His Asp Asp Leu Leu Glu Ala Arg Arg
 1 5 10

<210> 28
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR Product

<400> 28

Glu Cys Val Leu His Asp Asp Leu Leu Glu Ala Arg Arg
1 5 10

<210> 29

<211> 9

<212> PRT

<213> Human

<220>

<221> MISC_FEATURE

<222> (3)..(3)

<223> Xaa represents a histidine (H) or an arginine (R) residue

<400> 29

Val Leu Xaa Asp Asp Leu Leu Glu Ala
1 5

<210> 30

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 30

gctcctgcat gacgctctgt ctgca
25

<210> 31

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 31

gacgtcgtcg aggacatctc ccat

24

<210> 32

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 32

gaaggccaca gcaatcgtct ccagg

25

<210> 33

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 33

ccttgagaaa ctttaaggagt gtgtgctgca

30

<210> 34

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 34

ccttgagaaa cttaaggagt gtgtgttgcg
30

<210> 35
<211> 78
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Product

<220>
<221> CDS
<222> (1)..(78)
<223>

<400> 35
gag tgt gtg ttg cgt gac gac ctc ctt gag gcc cgc cgc gag tgt gtg
48
Glu Cys Val Leu Arg Asp Asp Leu Leu Glu Ala Arg Arg Glu Cys Val
1 5 10 15

ctg cat gac gac ctc ctt gag gcc cgc cgc
78
Leu His Asp Asp Leu Leu Glu Ala Arg Arg
20 25

<210> 36
<211> 26
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Product

<400> 36

Glu Cys Val Leu Arg Asp Asp Leu Leu Glu Ala Arg Arg Glu Cys Val
 1 5 10 15

Leu His Asp Asp Leu Leu Glu Ala Arg Arg
 20 25

<210> 37

<211> 9

<212> PRT

<213> Human

<220>

<221> MISC_FEATURE

<222> (2)..(2)

<223> Xaa represents Isoleucine or Leucine

<400> 37

Tyr Xaa Thr Asp Arg Val Met Thr Val
 1 5

<210> 38

<211> 8

<212> PRT

<213> HUMAN

<400> 38

Val Leu His Asp Leu Leu Glu Ala
 1 5